

5. NPDMS OPERATIONAL PROCEDURES

5.1 GENERAL FUNCTIONS

Batch Processing in NPDMS consists of three distinct subsystems, where each performs separate processing functions. Each subsystem is initiated by the Processing Driver (NDB000PA) during the nightly batch run (ND01). Batch Processing provides for regular processing that is required by NPDMS to support the property disposal and utilization function effectively and accurately. As with any system, NPDMS has certain batch processes that need to take place cyclically and as requested. The only requirement is to first complete the supply system (NSMS) batch processing prior to submitting the NPDMS batch driver job (ND01). The NPDMS batch process is composed of the following:

- NPDMS/NSMS Batch Interface
- Report Processing
- Internal Processing

The NSMS Batch Interface processes materials inventory items from NSMS and other supply systems that are provided on the NPDMS/NSMS Interface File (ND-NSMS) and are scheduled as part of the internal batch system processing. After the successful edit of the materials inventory items, NPDMS then adds the records to the NPDMS Case File (ND-CASE). Each record not passing the edits and validation criterion is updated in the interface file with an appropriate error message for correction, then it can be resubmitted with other items. The NPDMS and NSMS interface generates three reports: NSMS Accepted Items Report, NSMS Rejected Items Report and NSMS Matched/Overage/Underage Report.

The Report Processing provides for the generation of standard reports based upon selection and scheduling from the online Report Processing Subsystem. The Report Processing is initiated by System Operations on a daily basis by submitting job ND01, which should run after hours. It reads the NPDMS Report File (ND-REPORT) for records that have Report Effective Date equal to or less than the current system date (*DATX) and if the Report Status field on the record is equal to 'space', then the Report File record is accepted and processed resulting in the submission of a batch job to produce the desired report. Reports are sent to the individual designated in the 'Distribution' field on the NPDMS Report Subsystem scheduling screens.

The Internal Processing provides the capability for the following types of regular maintenance jobs that are performed as part of the daily clean-up routine:

- Case Number Serial Number Reset (Table 100)
- Entry Reference Number Serial Number Reset (Table 110)

- Report DD-1348 Document Number Serial Number Reset (Table 112)
- NP/NEMS Entry Reference Number Serial Number Reset (Table 115)
- Sale Number Serial Number Reset (Table 113)
- Sales Receipt Serial Number Reset (Table 135).

A generic job card will be provided by the development team, which will be tailored to each installation's needs, in consultation with the local ADP personnel, during the NPDMS Team's verification visit. Files identified in the *NPDMS Version Description Document* (VDD) should be included in each installation's regular backup procedures.

The general functions are supported by system administration, ADP support personnel, data base administration, systems and operations personnel. Specific procedures are unique to each receiving site. Generally, the system administration personnel along with the Property Disposal Officer (PDO) decide what groups of personnel or combinations of personnel may have access to particular system functions. For example, one group may have only access to the add function, while another group may have access only to the delete function.

The system administrator and PDO with assistance from ADP support personnel identify the Center's Profile requirements (i.e., Center default printer destination, GSA and DRMO defaults, and order of processing). The result of the System Administrators/PDO user access assignments is implemented and maintained by the Natural Security Administrator. The Natural Security Administrator/Data Base Administrator (DBA) sets up access through the use of NATURAL Security and ties it to the Natural Command Processor. For more information refer to Section 3.2 Security.

5.1.1 Systems Administration/ADP Support Personnel

Authorization to access NPDMS is coordinated and controlled by the site's NPDMS system administration personnel. The System Administrator coordinates the assignment of authorized user-id and password, authorization codes, specific user capabilities, and controls the limitations to various functions within the NPDMS application.

User-ids and password combinations are required to access CICS, TSO and the NPDMS NATURAL application. The password is used at logon time to access the system for entry of specific functions. The System Administrator coordinates with systems and operations personnel and/or Security Administrators/Data Base Administrators for system application accesses. For more information refer to Section 3.2 Security.

The System Administrator identifies which functional activities a user has authorization to use. A template listing functional activities is provided in Appendix F. The template may serve as a way of communicating user authorization for functional activities to the DBA or

Security Administrator. NOTE: The System Administrator must identify each functional activity that the user does not have authorization to use. For example, to disallow access to the reports function, identify all of the following activities: Reports, List Rpt, Process Rpt, Reports Schedule, Add Rpt, Change Rpt, Delete Rpt.

The System Administrator uses online table functions to process additions, changes and deletions to the following system tables:

- Establish and modify security requirements using the NPDMS User Access Table to permit specific user access to perform online updates and maintenance of NPDMS data. The System Administrator uses the online table functions to control NPDMS user access.
- Identify, establish, and maintain the Center's Profile requirements (i.e., Center default printer destination, GSA and DRMO defaults, and order of processing).
- Identify, establish, and maintain the Installation Codes for the validation and retrieval of Subinstallation data.
- Identify, establish, and maintain the Printer Destinations for the validation and retrieval of specific printer data.

Refer to Section 4.6 of the UOG for detailed processing instructions.

ADP Support personnel provide assistance with loading Job Control Language (JCL) in the Center Profile and User Access Tables, and identifying printer names and locations for remote printing. ADP Support personnel are responsible for modifying the JCL Table. Refer to UOG Section 5.2 and Appendix H for more information.

NOTE: All other system tables not identified above are normally provided and maintained by the Development Team. The System Administrator may modify other system tables only in an emergency; however, the site is responsible for maintaining those modifications. Also, the site must immediately notify the Development Installation of the modifications. This procedure allows the Development Installation to install the changes prior to a NASA-wide distribution of the next NPDMS release.

5.1.2 Data Base Administration/Security Administration

Installation will be performed in accordance with the *AIM Program Guidance, Standards and Guidelines* (Volume III) as described in the AIM Standard Operating Procedures For Centralized Distribution Of AIM Application Releases Section and the *NPDMS Version Description Document AIM-NPDMS-VDD-13*

The NPDMS Development Team will transfer the application software, data tables, and associated PREDICT data to the Distribution Installation located at NASA Headquarters prior to start of the installation of NPDMS. The AIM Distribution Bulletin Board will be updated accordingly.

The receiving NASA Site DBA will perform the installation of NPDMS at their site with the use of the VDD that is provided by the NPDMS Development team. The receiving NASA Site will perform the following activities:

- Retrieve NPDMS application software and data from the Central Distribution Installation (NASA Headquarters);
- Load the NPDMS training data into the NPDMS Training Data Base using the ADABAS load utilities;
- Load the NPDMS test data into the NPDMS Test Data Base using the ADABAS load utilities.

The DBA/Security Administrator provides and maintains access to the NPDMS users through the use of Natural Security and sets up functional Security for each user or groups of users. Functional Security is coordinated with the System Administrator, who will identify which functions a user may have access to. A template (NPDMS User Authorization Form) to coordinate the identification of functional security items is provided in Appendix F. NOTE: The functional activities that the user does not have authorization to use must be specific. For example, to limit user access to all report functions, the DBA must disallow all of the following Command Processor global commands: Reports, List Rpt, Process Rpt, Reports Schedule, Add Rpt, Change Rpt, Delete Rpt. Refer to Section 3.2 Security for further access information. For details, refer to the Command Processor manual from Software AG. The Security Administrator is responsible for the maintenance of data and application software on an on-going basis. The NPDMS team will assist in setting up functional security as it relates to the Command Processor.

5.1.3 Operations Personnel

NSMS and NPDMS batch processing must be executed in a specific order. The supply system (NSMS) batch processing must finish before Operations Personnel may submit the NPDMS batch driver (ND01). Refer to Order Of Processing in Section 5.2 and Appendix H.

Use site-specific data base save and recovery policies and procedures to run daily Restart/Recovery-backups.

NPDMS produces a report cover page for Report Output Distribution. Information on the report cover page is pulled from the NPDMS Report File.

5.2 SYSTEMS OPERATIONS

The NPDMS System Operations Requirements are composed of the following:

- Processing Driver Module must be scheduled and executed by Operations on a daily basis. NDB000PA generates the Job Control Language (JCL) necessary to run the particular batch job for each Maintenance and Report record encountered in the NPDMS Report File (ND-REPORT) with the proper Report Effective Date and Report Status Code (= 'blank'). The installation team will assist local ADP personnel in setting up the JCL for the batch processor driver. A sample of the JCL is provided in Appendix H.

This is accomplished by reading the User Access Table for the record with Table ID equaling '001' and Record Key equaling the User ID on the Report File. The User-Job-Card (information) is then moved to the system JCL reader to execute the job. The details of JCL, which is stored in the NPDMS Table 140, may be referenced in the following documents: Section 2.3.8 of the *NPDMS Design Specification AIM-NPDMS-DS-08*, Appendix F of the *NPDMS Version Description Document AIM-NPDMS-VDD-13* and a sample of Table 140 is provided in Appendix H of this document.

For each record read, the Report/Maintenance Program Id field on the record is used and the control is passed to the program contained in this field. This module first issues a 'CALLNAT NDB000NB' (Generate Report Cover Sheet) to print the "cover sheet" for the Report and program processing begins. Once program processing has completed, one of two things will happen. If the record read is for a standard cyclical report or maintenance job, it contains a value in the Report Frequency field (1 through 7) and a 'CALLNAT NDB000NA' is issued to increment the Report Effective Date that is incremented by this value. If this is an on-request report the record on the Report File is deleted.

For example, if the Report Frequency (= '2'), meaning the field value is weekly, the Report Effective Date is incremented by seven days. The next report record is read and the process is repeated until all of the report/maintenance records on the (ND-REPORT) are processed.

- Order of Processing: As with any system, NPDMS has certain batch processes that need to take place cyclically and as requested. The NSMS batch processing must complete prior to submitting the NPDMS batch driver (Job ND01). The NPDMS order of processing is determined by the execution sequence number (RPT-EXCTN-SEQ-NMBR) on the report file (ND-REPORT). The batch processing driver reads the ND-REPORT file by the execution sequence number (RPT-EXCTN-SEQ-NMBR) and submits the job in that predetermined sequence. The execution sequence number is maintained on the Report Maintenance Table (Table Id 055). The execution sequence numbers 0001 and 9000 through 9999 are reserved for NPDMS batch maintenance processes. The NSMS/NPDMS Interface, which has execution sequence number 0001, is the first to process. Several reports need to run in a specific order to ensure valid data is used for succeeding reports. These are as follows:

- NDR110PA GSA Data Set Generation
- NDR120PA SF-120 Report of Excess Personal Property
- NDR130PA SF-120 Withdrawal/Correction
- NDR002PA Pending GSA Acknowledgment
- NDR150PA NASA 1638 NPDMS Idle Personal Property Pickup Authority
- NDR001PA Awaiting Pickup
- NDR140PA DD-1348-1A DRMO Issue Release/Receipt Document
- NDR006PA Freeze Status
- NDR022PA Post Inventory
- NDR021PA Final Inventory/Reconciliation

The NPDMS Serial Number Reset Process must be the second to last job to run, which has execution sequence number 9800. The last job to run is the Batch Audit Report, which has an execution sequence number 9900. Site specific report numbers (NDRXXX) are in the range of 900-998, which must be assigned an execution sequence number in the range of 8000 through 8999.

The NPDMS JCL Batch job that executes NDR110PA (GSA Data Set Generation) writes the data set to Direct Access Storage Device (DASD). The data set is a Generation Data Group (GDG) of 6 generations. Once the data set is created by NDR110PA, it is transmitted to NASA Headquarters via the Network Data Mover (NDM). Each Installation should schedule NDR110PA to run every Wednesday. If there is a problem in the transmission, the data set can be re-transmitted on Thursday. If the NASA Headquarters does not receive an Installation's transmission by Thursday evening, it will not be consolidated with the other Installations' data. Refer to Figure 5.4, NPDMS GSA Electronic Transmission Timeline. Refer to Section 5.4 for further details about NASA Headquarters consolidation software.

- Remote Printing allows the ability to print reports at Host addressable printers only. This is accomplished by specifying the printer destination for the remote printer when scheduling the report. All reports are printed on designated remote printers.
- Default Job Card JCL load in Center Profile Table can be tailored for site specific software and hardware requirements.

- Restart/Recovery-backups must be run daily, with data base saves and recovery using site-specific policies and procedures.

Figure 5.1.3 displays the Software Architecture of this subsystem.

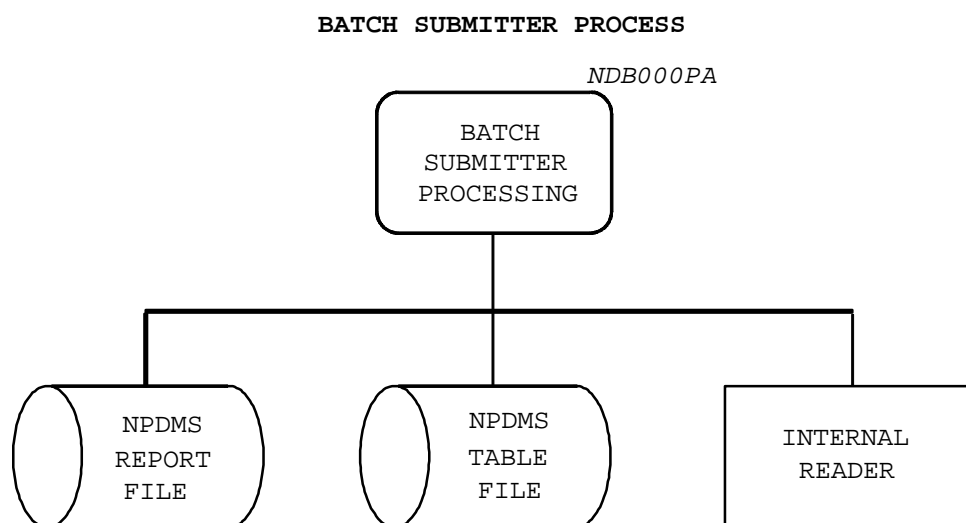


Figure 5.1.3 - Batch Submitter Process Software Architecture

The following is a list of the standard Report and Maintenance Jobs supplied with NPDMS:

PROGRAM	MAINTENANCE JOB NAME
NDM100PA	NASA Supply Management System Interface Pickup Authorization
NDM200PA	ERN and Serial Number Reset
NDM300PA	Batch Audit Report
NDM610PA	Set Pre-Inventory Date

PROGRAM	REPORT JOB NAME
NDR001PA	Awaiting Pickup
NDR002PA	Pending GSA Acknowledgment
NDR003PA	Sales Listing
NDR004PA	Items reported to GSA Over 180 Days
NDR005PA	Foreign Screening

NDR006PA	Freeze Status
NDR007PA	NEMS Interface Report
NDR008PA	Property Held by Property Disposal Officer
NDR009PA	Monthly Report of Utilization and Disposal of Idle, Excess, and Surplus NASA Personal Property
NDR010PA	Annual Report of Utilization and Disposal of Idle, Excess, and Surplus NASA Personal Property
NDR011PA	Foreign Disposal Approval
NDR012PA	NASA Form 811 - Determination for Classification of Property as Scrap/Salvage
NDR013PA	NASA form 812 - Determination for Authorization to Abandon or Destroy Surplus Property
NDR014PA	Idle Property Screening List
NDR015PA	Cases Eligible for Transfer to DRMO Listing
NDR016PA	Daily Transaction Report
NDR017PA	Annual Report of Exchange/Sale Transactions
NDR018PA	Sales Prep
NDR019PA	Abstract of Bids
NDR020PA	Bidder's Notification of Award
NDR021PA	Final Inventory/Reconciliation
NDR022PA	Post Inventory
NDR023PA	Performance Measures
NDR024PA	NSMS Accepted Items
NDR025PA	NSMS Rejected Items
NDR026PA	NSMS Matched/Overage/Underage
NDR027PA	Sales Slip, Sale of Government Personal Property
NDR110PA	GSA Data Set Generation
NDR120PA	SF-120 Report of Excess Personal Property
NDR130PA	SF-120 Withdrawal/Correction
NDR140PA	DD-1348-1A DRMO Issue Release/Receipt Document
NDR150PA	NASA 1638 NPDMS Idle Personal Property Pickup Authority

NDR160PA	Annual Report of Personal Property Provided to Non-Federal Organization
NDR170PA	Catalog for Stevenson-Wydler Screeners
NDR180PA	Status Report for Cases Undergoing Federal Screening
NDR180PB	Status Report for Cases Undergoing NASA-Wide Screening
NDR190PA	Status Report for Cases Undergoing Donation Screening
NDR200PA	Equipment Available for Federal Agencies
NDR210PA	IFM Interface File
NDR220PA	Archive History Files
NDR230PA	Final Dispositions for Each FSC Within a Date Range

All mandatory (identified by *) and optional (on-request) Maintenance Jobs and Reports are run in a specific order during batch processing as follows:

REPORT/MAINTENANCE PROCESS	RPT/MAINT PROGRAM ID
*Supply Management System Interface	NDM100PA
Other Scheduled Report Processing	
GSA Data Set Generation	NDR110PA
SF-120 Report of Excess Personal Property	NDR120PA
SF-120 Withdrawal/Correction	NDR130PA
Pending GSA Acknowledgment	NDR002PA
NASA 1638 NPDMS Idle Personal Property Pickup Authority	NDR150PA
Awaiting Pickup	NDR001PA
DD-1348-1A DRMO Issue Release/Receipt Document	NDR140PA
Freeze Status	NDR006PA
Post Inventory	NDR022PA
Final Inventory/Reconciliation	NDR021PA
Sales Listing	NDR003PA
Performance Measures	NDR023PA
Items reported to GSA Over 180 Days	NDR004PA

Foreign Screening	NDR005PA
NEMS Interface Report	NDR007PA
Property Held by Property Disposal Officer	NDR008PA
Monthly Report of Utilization and Disposal of Idle, Excess, and Surplus NASA Personal Property	NDR009PA
Annual Report of Utilization and Disposal of Idle, Excess, and Surplus NASA Personal Property	NDR010PA
Foreign Disposal Approval	NDR011PA
NASA Form 811 - Determination for Classification of Property as Scrap/Salvage	NDR012PA
NASA form 812 - Determination for Authorization to Abandon or Destroy Surplus Property	NDR013PA
Idle Property Screening List	NDR014PA
Cases Eligible for Transfer to DRMO Listing	NDR015PA
Daily Transaction Report	NDR016PA
Annual Report of Exchange/Sale Transactions	NDR017PA
Sales Prep	NDR018PA
Abstract of Bids	NDR019PA
Bidder's Notification of Award	NDR020PA
NSMS Accepted Items	NDR024PA
NSMS Rejected Items	NDR025PA
NSMS Matched/Overage/Underage	NDR026PA
Sales Slip, Sale of Government Personal Property	NDR027PA
Annual Report of Personal Property Provided to Non-Federal Organization	NDR160PA
Catalog for Stevenson-Wydler Screeners	NDR170PA
Status Report for Cases Undergoing Federal Screening	NDR180PA
Status Report for Cases Undergoing NASA-Wide Screening	NDR180PB
Status Report for Cases Undergoing Donation Screening	NDR190PA
Equipment Available for Federal Agencies	NDR200PA
IFM Interface File	NDR210PA
Archive History Files	NDR220PA
Final Dispositions for Each FSC Within a Date Range	NDR230PA

Set Pre-Inventory Dat	NDM610PA
Site-specific Reports	NDR9xxPA
*ERN and Serial Number Reset	NDM200PA
Batch Audit Report (optional, but advise this job run daily to easily obtain status from job history of all jobs that ran)	NDM300PA

5.3 NSMS INTERFACE

NPDMS has the capability to interface with NSMS via ADABAS Files that provide the data needed for NPDMS to control the day-to-day operations of materials inventory property.

5.3.1 NSMS Add

To perform an NSMS Add, property items are entered into NPDMS through an electronic (batch) interface on the NPDMS/NSMS Interface File. The following occurs:

- The submitted items are identified to NPDMS as Type 1 records.
- The NSMS Type 1 records are validated by NPDMS and established as a Non-Controlled Add to the NPDMS Case File.
- A Property Case Number is generated.
- An E01 record is generated on the Transaction File.
- Type 1 records on the Interface File are updated to a Type 2 (accepted) with a Property Case Number assigned to each record.
- Type 1 records on the Interface file that fail edit-checks are updated to a Type 3 (rejected) and are sent back to NSMS for correction and later re submission.

5.3.2 NSMS Receipt

Type 4 (Receipt) processing is performed online (see UOG Section 4.8.4). NSMS will delete type 4 records from the Interface File. If the NSMS items received are a quantity of zero, the user may delete the case record from the Case File using the Receipt process. NPDMS will notify NSMS via the NSMS Underage Report.

5.4 NASA HEADQUARTERS CONSOLIDATION SOFTWARE

A JCL Batch job is run daily (Monday - Friday), which will execute programs NDMGSAPA and NDMGSAPB. Program NDMGSAPA provides a report of the data sets received at NASA Headquarters by the various NASA Installations. Program NDMGSAPB consolidates the data sets and provides a report of personal property of NASA Installations to GSA. The data sets that are accepted are consolidated into one data set, which is a new generation of a GDG. The GDG contains 10 generations.

Program NDMGSAPB also generates a report of the consolidation effort. For each data set, the report shows the name of the NASA Installation that transmitted it, the total number of records written, and the total number of cases reported to GSA from that Installation. At the end of the report, it shows the total number of records written for all Installations and the total number of cases for all Installations reporting to GSA.

The consolidated data set is transmitted to a Personal Computer (PC) at GSA. This is done using File Transfer Protocol, which is resident on the NASA Headquarters mainframe. The data set is sent to the GSA PC. The Internet address of the transmission is 159.142.4.130.

NASA Property Disposal Management GSA Electronic Transmission Timeline

